US005111538A

United States Patent [19]

Chapman

[11] Patent Number: 5,111,538

[45] Date of Patent: May 12, 1992

[54] **KNOCKDOWN PORTABLE HOTWATER SHOWER AND SHOWER HEAD THEREFOR**

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[21] Appl. No.: **533,087**

[22] Filed: **Jun. 4, 1990**

[51] **Int. Cl.**[5] **A47K 3/22**

[52] **U.S. Cl.** **4/599**; 4/603; 4/615

[58] **Field of Search** ..... 4/603, 602, 599, 615, 4/616, 617, 598; 239/548, 556; 126/9 R

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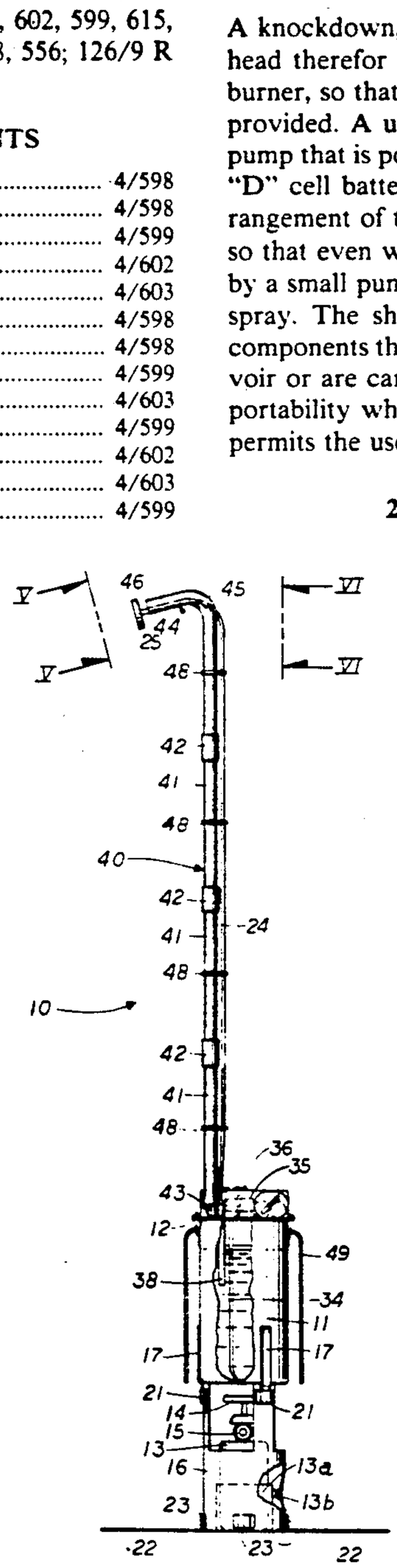
Attorney, Agent, or Firm—Bernhard Kreten

[57] **ABSTRACT**

A knockdown, portable hot water shower and shower head therefor is disclosed. The shower includes a gas burner, so that an adequate hot water supply is always provided. A unique shower head permits the use of a pump that is powered by a small energy source, such as "D" cell batteries. The shower head has a special arrangement of the apertures formed in the face thereof, so that even water delivered thereto at a low pressure by a small pump may be delivered to a user as a water spray. The shower is readily disassemblable and the components thereof are either nested in the water reservoir or are carried thereon for easy storage and transportability when not in use. This nesting arrangement permits the use of a gas burner in a portable shower.

23 Claims, 2 Drawing Sheets



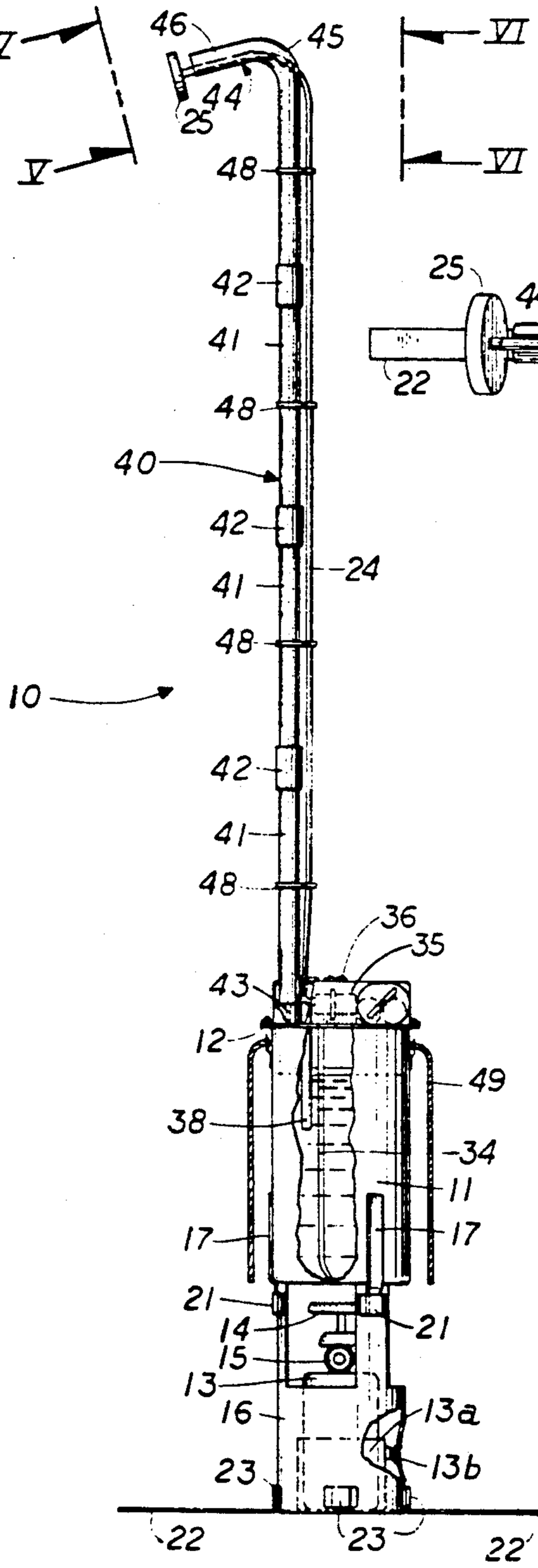


FIG. 1

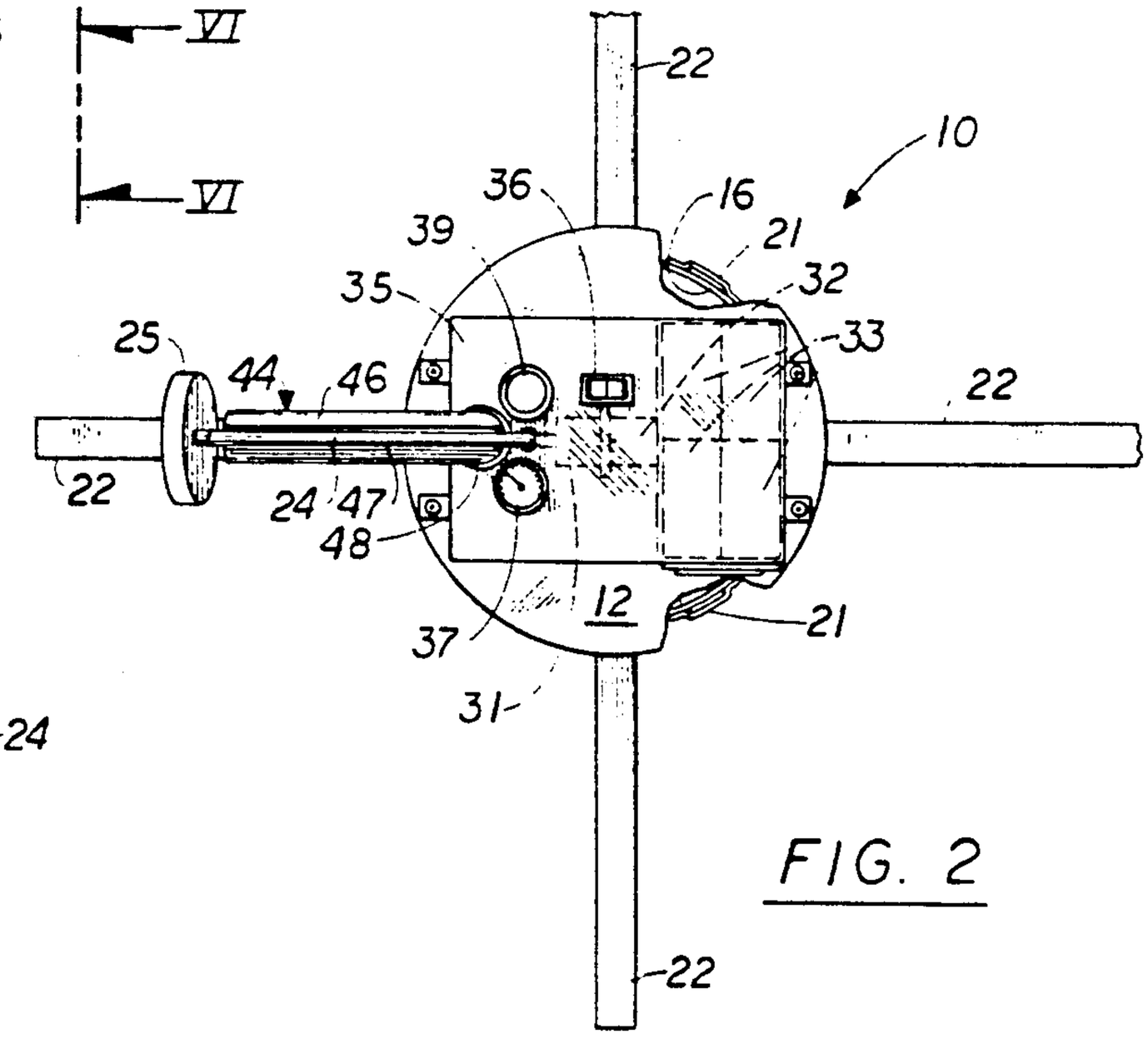


FIG. 2

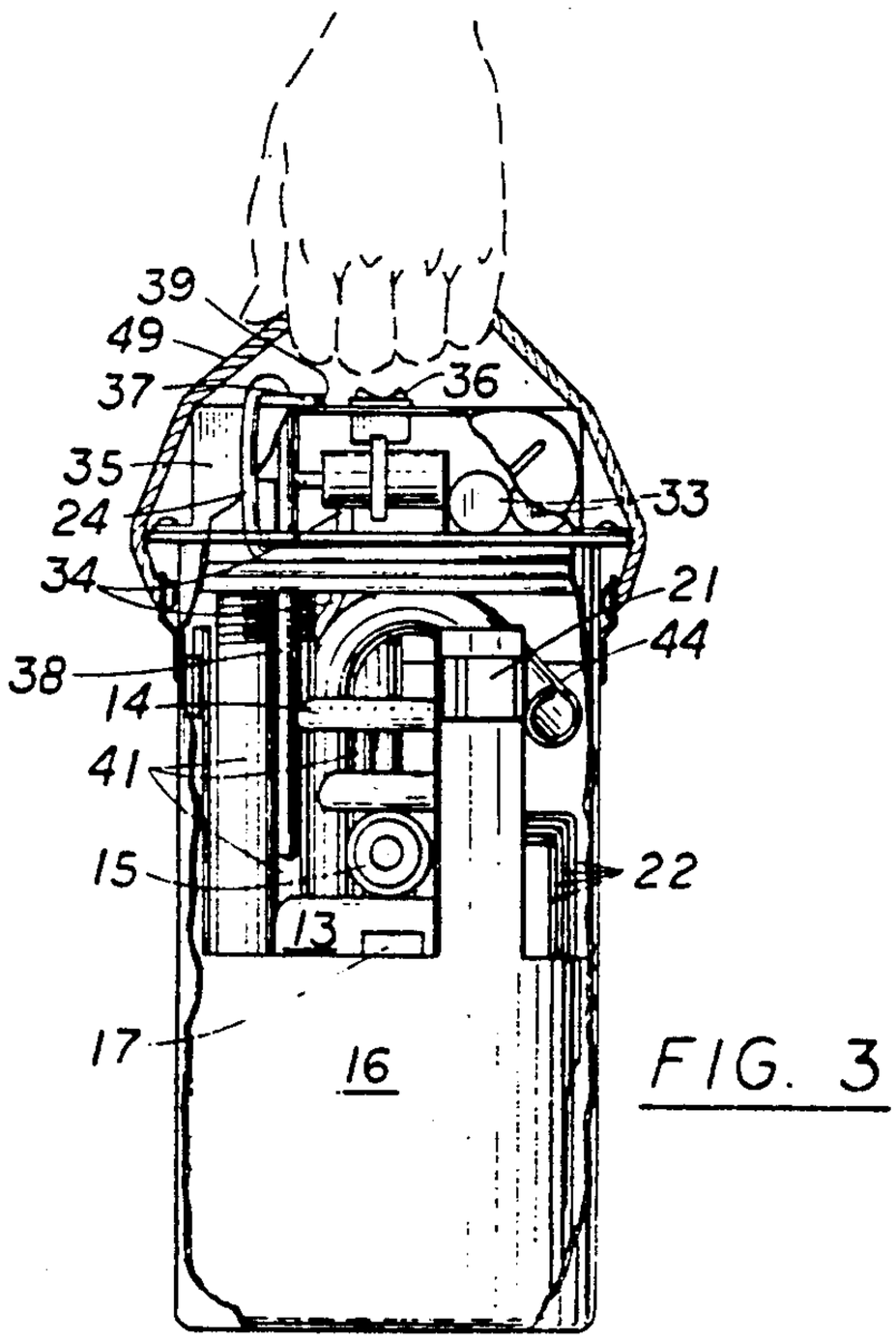


FIG. 3

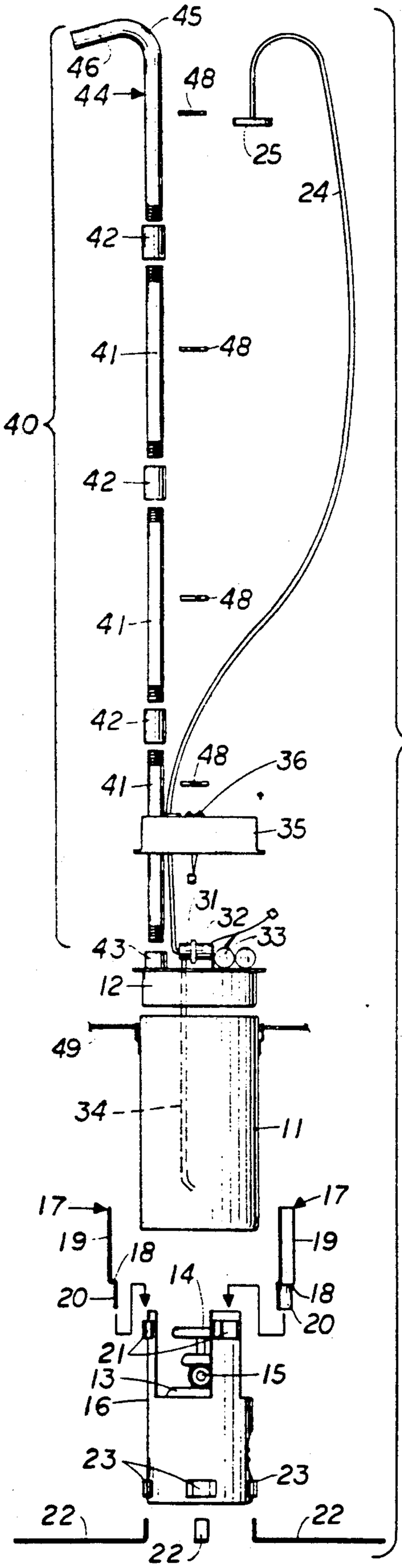


FIG. 4

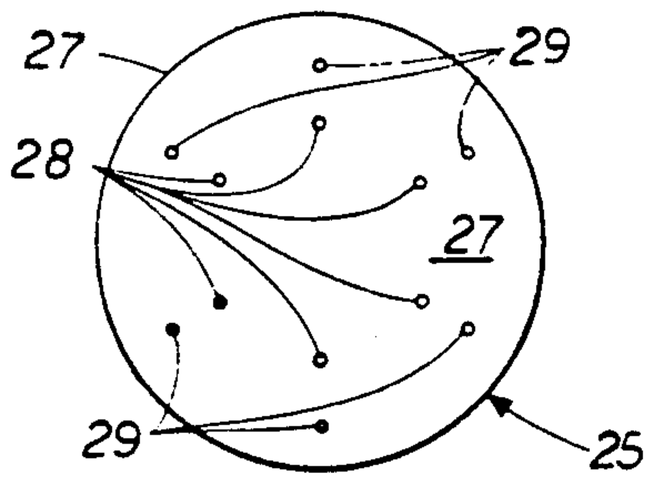


FIG. 5

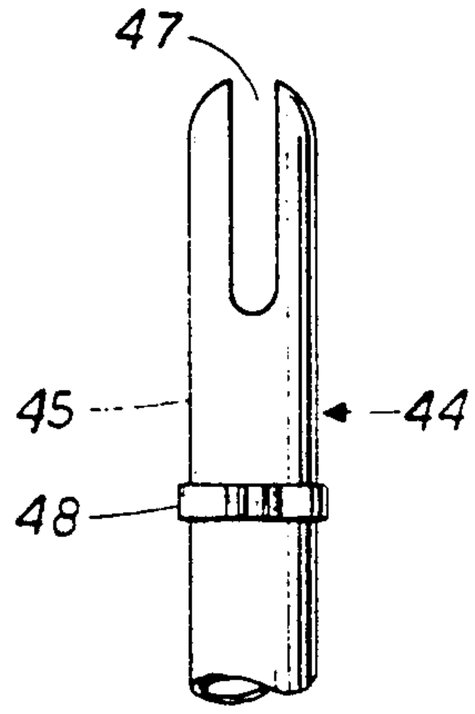


FIG. 6

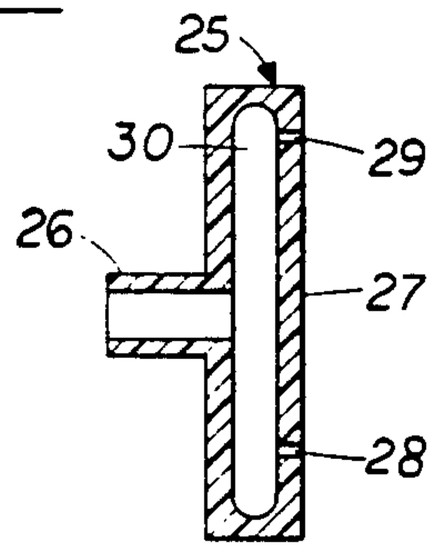


FIG. 7

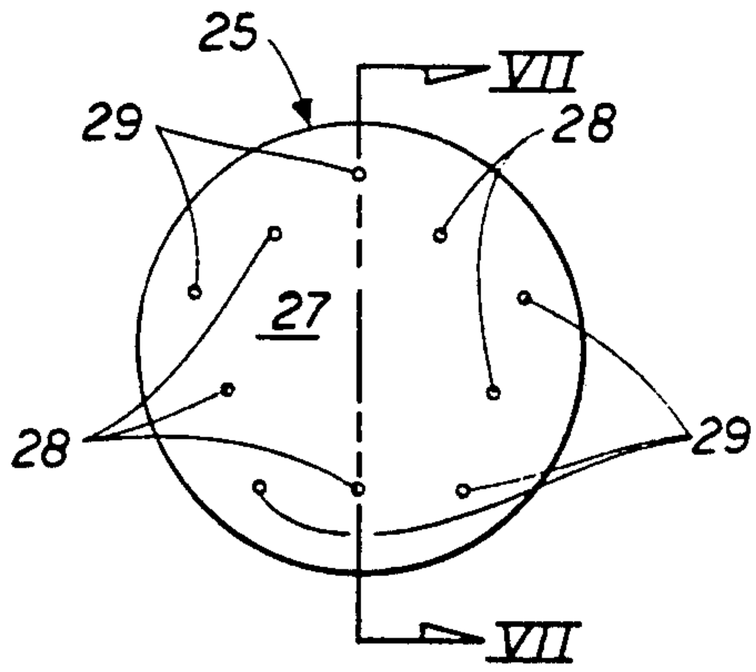


FIG. 8

KNOCKDOWN PORTABLE HOTWATER SHOWER AND SHOWER HEAD THEREFOR

FIELD OF THE INVENTION

The present invention relates to knockdown, portable, hot water showers and shower heads therefor.

BACKGROUND OF THE INVENTION

Portable showers are well known. Portable showers have been disclosed that can be relatively easily knocked down or disassembled and that can be used in a variety of places and situations. Examples of such knockdown portable showers of which I am aware are as follows:

INVENTOR	PATENT NO.	ISSUE DATE
TALBOT, ET AL.	1,663,735	March 27, 1928
ORTYL	2,308,452	January 12, 1943
BOWMAN	2,567,506	September 11, 1951
BURNETT	3,080,568	March 12, 1963
NELSON	3,431,565	March 11, 1969
VEECH	3,606,618	September 21, 1971
JOHNSON	3,646,618	March 7, 1972
GREENLEAF	4,453,280	June 12, 1984

Each of the above-listed references, while being useful for its purpose, suffers from at least one of several drawbacks.

Particular problems have been encountered with providing an adequate hot water supply. Often, in an attempt to keep such showers small and portable, resort has been made to solar-powered and other similar types of small heat sources. Unfortunately, such energy (heat) sources are usually not powerful enough to provide the desired supply of hot water. Traditionally, the use of a gas burner to heat the water has been avoided in portable showers due to their size and bulk.

Another problem often encountered is that, in an attempt to keep such showers small and portable, resort is often had to the use of gravity or small pumps, requiring a power source to pump or otherwise deliver water to an individual when showering. Such means for supplying and delivering the water often results in inadequate water pressure being built up or provided to deliver the water as a fine spray. Thus, use of a large powerful power source, such as an automotive or other large battery is often required.

Thus, it can be seen that there remains a need for a simple knockdown, portable hot water shower which can provide: an adequate supply of hot water, a fine water spray during shower and still be readily portable for storage or transportation in a single easy-to-carry container.

SUMMARY OF THE INVENTION

It is a primary object of the present invention to provide a knockdown, portable, hot water shower that is simple in construction, readily assemblable for use anywhere as desired, and readily disassemblable for the transportation and/or storage thereof.

It is another primary object of the present invention to provide such a portable shower that utilizes a gas burner in order to heat the water supply thereof, such that an adequate supply of hot water is provided and yet which shower is arranged, so that when knocked down, the gas burner may be nested with the remainder of the components of the shower for easy transportation and storage therewith.

It is still another primary object of the present invention to provide such a portable shower that has a unique shower head that delivers water in a fine spray, even when the water is delivered thereto at a relatively low pressure, such as from a small pump powered by common household batteries.

It is still yet another object of the present invention to provide such a portable shower that, in addition to being readily and easily knocked down, the components thereof may be received in a storage container, being nested therein to provide compactness necessary for easy transportation and storage.

In accordance with the teachings of the present invention, a knockdown portable hot water shower is disclosed. This shower has a disassembled configuration utilized for storing and transporting the shower when not in use. The shower has an assembled configuration utilized for showering by an individual when in use.

The shower includes:

(1) A container for use as a storage container when the shower is in the disassembled configuration. Components of the portable shower are received in the container for the storage thereof. Also the container is used as a reservoir when the shower is in the assembled configuration, wherein water is received and heated therein for the use thereof.

(2) A gas burner including a burner head is positioned below the container when the shower is in the assembled configuration. In this manner, the water in the container is heated for showering by an individual when in use. The gas burner is sized for being received in the container when the shower is in the disassembled configuration. In this manner, the gas burner is stored when not in use.

(3) Means is provided for supporting the container, including the shower head above the burner when the shower is in the assembled configuration.

(4) A flexible water conduit is provided that has a first lower end and a second upper end. The conduit extends upwardly from the container when the shower is in the assembled configuration. In this way, hot water is delivered upwardly through the conduit from the first end to the second end for showering by an individual when in use. A shower head is carried by the second end of the flexible water conduit above the container when the shower is in the assembled configuration. In this manner, hot water is delivered from the second end of the conduit and passes therethrough being delivered therefrom as a hot water spray for showering by an individual when in use. The shower head is received in the container when the shower is in the disassembled configuration, wherein the shower head is stored when not in use. Means is provided for supporting the flexible water conduit with the second end carrying the shower head thereon above the first end of the conduit when the shower is in the assembled configuration.

(5) A pump is positioned between the water in the container and the first end of the water conduit when the shower is in the assembled configuration. This pump, pumps the hot water from the container, through the conduit, to the shower head, wherein hot water is delivered for showering by an individual when in use.

Arranged as described above, when the shower is in the assembled configuration, the shower may be readily knocked down into the disassembled configuration and

the components thereof may be carried by the container with at least a portion of the components nested therein.

Finally, the container includes a handle for transporting the portable shower when in the disassembled configuration, and all of the components of the shower may be transported in the container when not in use.

Preferably, the pump is an electric pump that is powered by a plurality of "D" cell batteries or other means commonly carried by campers.

In further accordance with the teachings of the present invention, the gas burner is a propane or butane burner.

In still further accordance with the teachings of the present invention a shower head is disclosed. When utilized on a portable shower, this shower head permits the shower to utilize a relatively small pump that does not create much water pressure. The shower head has a plurality of apertures formed therein. A first portion of the apertures are arranged and spaced in a first, inner five-point star configuration. A second portion of the apertures are arranged in a second outer five-point star configuration that surrounds the inner configuration. Preferably, the apertures of the inner and outer five-point star configurations are not aligned with one another. The apertures are cylindrical in shape allowing formation of an appropriate discharge of water. Such an arrangement permits even low pressure water received in the head to exit therefrom as a water spray.

These and other objects of the present invention will become apparent from a reading of the following detailed specification, taken in conjunction with the enclosed drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. **1** is a side view of the knockdown, portable hot water shower of the present invention, in the assembled configuration, with portions thereof broken away for the sake of clarity.

FIG. **2** is an overhead view of the shower of FIG. **1**.

FIG. **3** is a side view of the shower of the present invention in the disassembled configuration, wherein the components thereof are nested in a storage container for the easy transportation thereof and with parts thereof broken away to show the nesting arrangement in the container.

FIG. **4** is an exploded view of the shower of FIG. **1** showing how the shower is easily knocked-down.

FIG. **5** is a front view of the shower head in an alternative embodiment to FIG. **8** of the present invention taken along line V—V of FIG. **1**.

FIG. **6** is an end view of the uppermost support portion of the present invention taken along lines VI—VI of FIG. **1**.

FIG. **7** is a cross-section view of the shower head taken along lines VII—VII of FIG. **8**.

FIG. **8** is a front view of the shower head taken along line V—V of FIG. **1** in its preferred form.

DESCRIPTION OF PREFERRED EMBODIMENTS

Referring first to FIGS. **5**, **7** and **8**, the shower head **25** of the present invention is illustrated. This shower head **25** has a unique arrangement of the apertures on the face thereof, which permits a fine water spray from the shower head **25**, even if the water is being delivered to the shower head at a relatively low pressure.

The shower head **25** includes an inlet **26**, wherein water enters the head **25**. Opposite the inlet **26** is a shower face **27** having a plurality of apertures **28** and **29** formed therein. Preferably, these apertures **28** and **29** are substantially cylindrical in shape. An empty space **30** separates the inlet **26** from the face **27** in the interior of the shower head.

A first portion **28** of the apertures are arranged on the face **27** spaced about thereon in a first inner five-point star configuration. A second portion **29** of the apertures are arranged on the face spaced about thereon in a second outer five-point star configuration. Preferably, the apertures **28** and **29** of the inner and outer five-point star configurations are substantially disaligned with one another, approximating a pentagon formation. An analogous six-point star configuration is shown in FIG. **5**.

Referring now to the drawings generally, the knockdown, portable, hot water shower **10** is illustrated. This shower **10** has a disassembled configuration utilized for storing and transporting the shower **10** when not in use (FIG. **3**). The shower **10** further has an assembled configuration utilized for showering by an individual when in use (FIG. **1**).

Referring in particular now to FIGS. **1**, **2** and **4**, when in the assembled configuration, the shower **10** has container **11** which serves as a reservoir, wherein water is received and heated for use thereof. Preferably, this reservoir **11** is substantially cylindrical in shape including a side wall, a bottom wall and an open top. Also, it is preferred that this container **11** be fabricated from aluminum or any other suitably conductive material, so as to facilitate the heating of the water disposed therein, as will be discussed below.

It is contemplated herein that the container will be sized to have a liquid capacity of at least two gallons. However, for best heating of the water and most efficient use of the shower **10**, a two gallon capacity is preferred.

Removably disposed on the container **11**, extending over the open top thereof is a lid **12**. Lid **12** is tight-fitting, so that the water stored in the container **11** is retained therein.

Disposed below the container **11** is a gas burner **13**. This gas burner **13** includes a burner head **14** for heating the water in the container **11**. This burner includes an on/off valve **15** for manually controlling and adjusting the flow of gas and the height of the flame from the burner head **14**. The burner **13** is, preferably, a propane gas burner, a butane gas burner or any other gas burner normally utilized by campers to heat water. This heated water may then be used for showering by an individual when the shower **10** is in use.

Surrounding and housing the gas burner **13** and the burner head **14** thereof is a support housing **16**. Interposed between housing **16** and burner **13** is a sleeve **13***a* fixed in housing **16**. A set of screws **13***b* fixes the burner **13** to the housing **16** via sleeve **13***a*. This support housing **16** has openings formed therein, providing access to the valve **15**, so the gas flow may be turned on or off or otherwise adjusted, and further so that the burner head **14** may be lit.

Supported on the top of the housing **16** is the container **11**. Since the support housing **16** is sized so as to be nested in the container **11** with the gas burner **13** nested therein when the shower **10** is in the disassembled configuration, when supported on the housing **16**, the container **11** circumferentially overhangs the support housing **16**. Accordingly, a means is provided for supporting the container **11** above the gas burner **14**.

The means for supporting the container **11** above the burner head **14** includes a plurality of support uprights **17**. Each of these support uprights **17** has a shoulder **18** formed therein (see, in particular, FIG. **4**). Each of the support uprights **17** has a stabilizing portion **19** extending upwardly from the shoulder **18** and a tab portion **20** extending downwardly from the shoulder **18**. The tab portions **20** of the uprights **17** are removably received in respective brackets **21** formed on the side wall of the support housing **16** and circumferentially spaced thereabout. In this manner, the support uprights **17** are carried by the support housing **16**, extending upwardly therefrom. Formed thusly, the container **11** is received on and circumferentially supported by the shoulder **18**. The stabilizing portions **19** circumferentially surround the container **11**, thereby stabilizing and further supporting the container **11**.

The support housing **16** further includes a plurality of stabilizing legs **22** that extend substantially outwardly from the housing **16**. Legs **22** include a bent portion which extends upwardly therefrom, defining a tab portion. Each of the tab portions are removably received in respective brackets **23** that are spaced circumferentially about the support housing **16** and are secured thereto. In this fashion, legs **22** are removably carried by the housing **16** for stabilizing the shower **10** during use thereof.

A flexible water conduit **24** is provided. Conduit **24** has a first lower end and a second upper end. The water conduit **24** extends substantially upwardly from the first lower end, so that the second upper end is located above both the first lower end and the container **11**.

Carried on the second upper end of the water conduit **24** is the shower head **25**, described at length above. This second end of the water conduit **24** is joined to the inlet **26** of the shower head **25**.

Disposed on and carried by the lid **12** is a pump **31**. Pump **31** is driven by, preferably, an electric motor **32** which, in turn, is, preferably, powered by a plurality of "D" sized cell batteries **33**, or any other relatively small power unit, commonly in the possession of campers and the like. Such small power units may be utilized because, due to the unique arrangement of the shower head **25** (as discussed above) a powerful pump is not necessary.

The pump **31** is removably connected to the second upper end of a siphon conduit **34**. The first lower end of the siphon conduit **34** is disposed in the water in the container, so as to extend to substantially the bottom wall of the container **11**. The pump **31** is further connected to the first lower end of the water conduit **24**.

In the above fashion, hot water in the container may be pumped by the pump **31** from the first end to the second end of the siphon conduit and further from the first end to the second end of the water conduit **24**, where it is received by the shower head **25** for delivery in a water spray to an individual when in use.

Pump **31**, motor **32** and batteries **33** are all housed in a housing **35** carried by the lid **12**. Also carried on the housing **35** is an on/off switch **36** for controlling operation of the motor **32** and the pump **31**.

Further removably carried by the lid **12** is a thermometer. The thermometer includes a display portion **37** carried by the housing **35**. The thermometer further includes a downwardly extending probe portion **38** that extends from the lid **12** and into the water in the container **11**. In this fashion, the temperature of the water being heated in the container **11** is constantly measured by the probe portion **38** and displayed on the display portion **37**.

An alarm **39** is also housed in the housing **35**. This alarm may be a sound alarm (such as a horn), a visual alarm (such as a light) or any other alarm desired. The alarm **39** is operatively connected to the thermometer so that when the thermometer senses that the water in the container **11** reaches a preselected temperature (such as 100° F.), the alarm is activated, warning the user of the shower **10** that the water in the container **11** has attained the temperature selected. This protects the user from receiving water that is too hot for their desire. The alarm **39** will stop when, for example, the motor **32** is turned on using switch **36**.

Secured to the container **11** is a means for supporting the flexible water conduit **24** with the second end thereof carrying the shower head **25** above the first end of the conduit **24**. This means includes an integral knockdown upstanding support **40**. The upstanding support is comprised of a plurality of support portions **41**, that are axially, removably secured to one another to form the integral support **40**. In this respect, each of the support portions **41** includes a pair of threaded ends. A plurality of threaded collars **42** matingly engage adjoining threaded ends of axially adjacent support portions **41**, joining the portions **41** to one another. The lower most support portion **41** is matingly engaged in a threaded collar **43** on the lid **12**, whereby the upstanding support **40** is supported.

With reference now to FIG. **6**, the uppermost support portion **44** has a bend **45** formed therein forming an outwardly extending portion **46**. This portion **44** has a slot **47** formed therein at the bend **45** thereof and extending outwardly along the portion **46**. In this fashion, the water conduit **24** including the second end thereof may be received and supported in the slot **47** with the shower head **25** being directed substantially outwardly to deliver the hot spray of water to an individual during use of the shower **10**.

It is to be noted that, if desired, the conduit **24** and the shower head **25** may be removed from this upstanding support **40** for use as a hand-held shower head.

A plurality of clips **48** are provided as a means to removably secure the water conduit **24** to the upstanding support **40**. Each of the clips **48** has a first end that is removably secured (clipped) to the upstanding support **40** along the length thereof. Each of the clips **48** further has a second end that is removably secured (clipped) to the water conduit **24**, along the length thereof. In this fashion, the water conduit **24** is removably secured to and supported by the support **40** when in the assembled configuration.

Finally, the container **11** includes a removable handle **49**. The handle **49** may, for example, be in the form of a rope secured at both ends to respective ears formed on the side wall of the container, or any other suitable form. The handle **49** is used for transporting the shower **10** when knocked down and placed in the disassembled configuration.

When assembled as described above, the shower **10** may be readily knocked down into the disassembled configuration. In this disassembled configuration, the components of the shower **10** are carried by the container **11** with at least a portion of the components nested therein and with the remainder of the components carried thereon.

With reference now to FIGS. **3** and **4**, the disassembled configuration is illustrated, as described above. All

of the components of the shower **10** are either nested in or carried on the container **11** for easy transport thereof using the handle **49**. In this respect, the container is used as a storage container.

The uprights **17**, stabilizing legs **22**, support portions **41**, and collars **42** are all nested within support housing **16**, circumferentially spaced about the burner **13**. Support housing **16** is nested within container **11**. The water conduit (which passes through an aperture so formed in the lid **12**) **24** is substantially received in the container being wound circularly and nested on the other components located therein. The shower head **25** is also nested in the container **11**. Finally, loose components, such as clips **48** are disposed in the bottom of the support housing **16**.

Once all the elements have been knocked-down and nested in the container **11**, as described above, the lid **12** may be placed on the container **11**, thereby retaining and storing the components therein. The pump **31**, thermometer **37**, alarm **39**, and motor **32**, batteries **33** and on/off switch **36** are all housed in the housing **35** and carried on the lid **12**.

Obviously, many modifications may be made without departing from the basic spirit of the present invention. Accordingly, it will be appreciated by those skilled in the art that within the scope of the appended claims, the invention may be practiced other than has been specifically described herein.

I claim:

1. A knockdown portable hot water shower having a disassembled configuration utilized for storing and transporting the shower when not in use, and an assembled configuration utilized for showering by an individual when in use, the knockdown portable hot water shower is comprised of:

a container for use as a storage container when the shower is in the disassembled configuration, wherein components of the portable shower are received therein for the storage thereof, and further for use as a reservoir when the shower is in the assembled configuration, wherein water is received and heated therein for the use thereof;

a gas burner including a burner head which is positioned above the gas burner and both of which are positioned below the container when the shower is in the assembled configuration, wherein the water in the container is heated for showering by an individual when in use, the gas burner and burner head sized for being received in the container when the shower is in the disassembled configuration, wherein the gas burner is stored when not in use;

means for supporting the container above the gas burner;

a flexible water conduit having a first lower end and a second upper end, the conduit extending upwardly from the container when the shower is in the assembled configuration, wherein hot water is delivered upwardly through the conduit from the first end to the second end for showering by an individual when in use;

a shower head carried by the second end of the flexible water conduit above the container when the shower is in the assembled configuration, wherein hot water delivered from the second end of the conduit passes therethrough and is delivered therefrom as a hot water spray for showering by an individual when in use, the shower head being received in the container when the shower is in the disassembled configuration, wherein the shower head is stored when not in use;

means for supporting the flexible water conduit with the second end carrying the shower head thereon above the first end of the conduit when the shower is in the assembled configuration;

a pump between the water in the container and the first end of the water conduit when the shower is in the assembled configuration for pumping the hot water from the container, wherein hot water is delivered for showering by an individual when in use;

wherein when the shower is in the assembled configuration, the shower may be readily knocked-down into the disassembled configuration and the components thereof may be carried by the container with at least a portion of the components nested therein; and

the container including a handle for transporting the portable shower when in the disassembled configuration, wherein all of the components of the shower may be transported therewith when not in use.

wherein the means for supporting the container above the gas burner in the assembled configuration is comprised of:

a support housing for housing the gas burner therein when the shower is in the assembled and disassembled configurations, and further for supporting the container thereon above the gas burner when the shower is in the assembled position, the support housing being sized, so as to be nested in the container with the gas burner nested therein, when the shower is in the disassembled configuration.

2. The knockdown portable hot water shower of claim **1**, wherein the gas burner is a propane gas burner.

3. The knockdown portable hot water shower of claim **1**, wherein the gas burner is a butane gas burner.

4. The knockdown portable hot water shower of claim **1**, wherein the means for supporting the container above the gas burner in the assembled configuration is further comprised of:

a plurality of support uprights carried by the support housing and extending upwardly therefrom, each of said uprights having a shoulder formed therein, such that the container is received on and supported by the shoulders when in the assembled configuration, the support uprights further being removable from the housing so that when in the disassembled configuration, the support uprights may be removed from the housing and received in the container so as to be nested therein for storage when not in use.

5. The knockdown portable hot water shower of claim **4**, wherein the support uprights further include stabilizing portions extending upwardly from the shoulders, whereby the container is stabilized and further supported by the support uprights when in the assembled configuration.

6. The knockdown portable hot water shower of claim **1**, wherein the support housing further includes a plurality of stabilizing legs extending substantially outwardly from the housing for stabilizing the housing when the shower is in the assembled configuration.

7. The knockdown portable hot water shower of claim **6**, wherein the stabilizing legs are removable from the housing and received in the container, so as to be

nested therein when the shower is in the disassembled configuration for storage when not in use.

8. The knockdown portable hot water shower of claim **1**, wherein the pump is an electric pump powered by a plurality of "D" cell batteries.

9. The knockdown portable hot water shower of claim **1**. wherein the pump includes a siphon conduit having a first lower end disposed in the water in the container and a second upper end connected to the pump when the shower is in the assembled configuration, wherein hot water in the container is delivered to the water conduit.

10. The knockdown portable hot water shower of claim **1**, further comprised of:

a lid removably disposed over the container, thereby sealing the container for storing and retaining the water therein when the shower is in the assembled configuration and further for storing and retaining components therein when the shower is in the disassembled configuration.

11. The knockdown portable hot water shower of claim **1**, wherein the shower head has a plurality of substantially cylindrical apertures formed therein, such that in the assembled position, water received in the shower head from the second end of the water conduit exits therefrom as a hot water spray to an individual when showering, a first portion of the apertures arranged spaced in a first, inner five-point star configuration and a second portion of the apertures arranged spaced in a second, outer five-point star configuration that surrounds the inner configuration.

12. The knockdown portable hot water shower of claim **11**, wherein the apertures of the inner and outer five-point star configurations are disaligned with one another, approximating a pentagon formation.

13. A knockdown portable hot water shower having a disassembled configuration utilized for storing and transporting the shower when not in use, and an assembled configuration utilized for showering by an individual when in use, the knockdown portable hot water shower is comprised of:

a container for use as a storage container when the shower is in the disassembled configuration, wherein components of the portable shower are received therein for the storage thereof, and further for use as reservoir when the shower is in the assembled configuration, wherein water is received and heated therein for the use thereof;

a gas burner including a burner head which is positioned above the gas burner and both of which are positioned below the container when the shower is in the assembled configuration, wherein the water in the container is heated for showering by an individual when in use, the gas burner and burner head sized for being received in the container when the shower is in the disassembled configuration, wherein the gas burner is stored when not in use;

means for supporting the container above the gas burner and burner head when the shower is in the assembled configuration;

a flexible water conduit having a first lower end and a second upper end, the conduit extending upwardly from the container when the shower is in the assembled configuration, wherein hot water is delivered upwardly through the conduit from the first end to the second end for showering by an individual when in use;

a shower head carried by the second end of the flexible water conduit above the container when the shower is in the assembled configuration, wherein hot water delivered from the second end of the conduit passes therethrough and is delivered therefrom as a hot water spray for showering by an individual when in use, the shower head being received in the container when the shower is in the disassembled configuration, wherein the shower head is stored when not in use;

means for supporting the flexible water conduit with the second end carrying the shower head thereon above the first end of the conduit when the shower is in the assembled configuration;

a pump between the water in the container and the first end of the water conduit when the shower is in the assembled configuration for pumping the hot water from the container, wherein hot water is delivered for showering by an individual when in use;

wherein when the shower is in the assembled configuration, the shower may be readily knocked-down into the disassembled configuration and the components thereof may be carried by the container with at least a portion of the components nested therein;

the container including a handle for transporting the portable shower when in the disassembled configuration, wherein all of the components of the shower may be transported therewith when not in use,

a lid removably disposed over the container, thereby sealing the container for storing and retaining the water therein when the shower is in the assembled configuration and further for storing and retaining components therein when the shower is in the disassembled configuration, and

a thermometer carried by the lid and extending downwardly therefrom into the container and the water therein when the shower in in the assembled configuration for continuously measuring the temperature of the water in the container during the use thereof.

14. The knockdown portable hot water shower of claim **13**, wherein the shower is further comprised of:

an alarm connected to the thermometer, such that, when in the assembled configuration, the thermometer senses that the water in the container reaches a preselected temperature, the alarm is activated warning the user of the shower that the water in the container has attained the temperature sensed.

15. A knockdown portable hot water shower having a disassembled configuration utilized for storing and transporting the shower when not in use, and an assembled configuration utilized for showering by an individual when in use, the knockdown portable hot water shower is comprised of:

a container for use as a storage container when the shower is in the disassembled configuration, wherein components of the portable shower are received therein for the storage thereof, and further for use as a reservoir when the shower is in the assembled configuration, wherein water is received and heated therein for the use thereof;

a gas burner including a burner head which is positioned above the gas burner and both of which are positioned below the container when the shower is in the assembled configuration, wherein the water

in the container is heated for showering by an individual when in use, the gas burner and burner head sized for being received in the container when the shower is in the disassembled configuration, wherein the gas burner is stored when not in use;

means for supporting the container above the gas burner and burner head, when the shower is in the assembled configuration;

a flexible water conduit having a first lower end and a second upper end, the conduit extending upwardly from the container when the shower is in the assembled configuration, wherein hot water is delivered upwardly through the conduit from the first end to the second end for showering by an individual when in use;

a shower head carried by the second end of the flexible water conduit above the container when the shower is in the assembled configuration, wherein hot water delivered from the second end of the conduit passes therethrough and is delivered therefrom as a hot water spray for showering by an individual when in use, the shower head being received in the container when the shower is in the disassembled configuration, wherein the shower head is stored when not in use;

means for supporting the flexible water conduit with the second end carrying the shower head thereon above the first end of the conduit when the shower is in the assembled configuration;

a pump between the water in the container and the first end of the water conduit when the shower is in the assembled configuration for pumping the hot water from the container, wherein hot water is delivered for showering by an individual when in use;

wherein when the shower is in the assembled configuration, the shower may be readily knocked-down into the disassembled configuration and the components thereof may be carried by the container with at least a portion of the components nested therein;

the container including a handle for transporting the portable shower when in the disassembled configuration, wherein all of the components of the shower may be transported therewith when not in use,

wherein the means for supporting the flexible water conduit in the assembled configuration is comprised of:

a plurality of support portions, each of said support portions axially removably secured to one another when in the assembled configuration forming an integral knockdown upstanding support, at least one of said support portions further being removably carried by the container when in the assembled configuration, wherein the support is maintained upstanding for supporting the water conduit when in use; and

means for removably securing the water conduit to the integral upstanding support when in the assembled configuration, whereby the water conduit is supported when in use.

16. The knockdown portable hot water shower of claim **15**, wherein the means for removably securing the water conduit to the integral upstanding support when in the assembled configuration is comprised of:

a plurality of clips, each of said clips having a first end, joined to the upstanding support and a second end, joined to the water conduit, so that the conduit is removably secured to and supported by the upstanding support when in the assembled configuration.

17. The knockdown portable hot water shower of claim **15**, wherein each of the support portions includes a pair of threaded ends, and further wherein a plurality of collars are provided for matingly engaging the adjoining threaded ends of axially adjacent support portions, such that the support portions are removably axially secured to one another forming the upstanding support when in the assembled configuration, and further such that the upstanding support may be easily knocked down and disposed in the container being nested therein when in the disassembled configuration.

18. A knockdown portable hot water shower having a disassembled configuration utilized for storing and transporting the shower when not in use, and an assembled configuration utilized for showering by an individual when in use, the knockdown portable hot water shower is comprised of:

a container for use as a storage container when the shower is in the disassembled configuration, wherein components of the portable shower are received therein for the storage thereof, and further for use as a reservoir when the shower is in the assembled configuration, wherein water is received and heated therein for the use thereof;

a gas burner including a burner head which is positioned above the gas burner and both of which are positioned below the container when the shower is in the assembled configuration, wherein the water in the container is heated for showering by an individual when in use, the gas burner and burner head sized for being received in the container when the shower is in the disassembled configuration, wherein the gas burner is stored when not in use;

means for supporting the container above the gas burner;

a flexible water conduit having a first lower end and a second upper end, the conduit extending upwardly from the container when the shower is in the assembled configuration, wherein hot water is delivered upwardly through the conduit from the first end to the second end for showering by an individual when in use;

a shower head carried by the second end of the flexible water conduit above the container when the shower is in the assembled configuration, wherein hot water delivered from the second end of the conduit passes therethrough and is delivered therefrom as a hot water spray for showering by an individual when in use, the shower head being received in the container when the shower is in the disassembled configuration, wherein the shower head is stored when not in use;

means for supporting the flexible water conduit with the second end carrying the shower head thereon above the first end of the conduit when the shower is in the assembled configuration;

a pump between the water in the container and the first end of the water conduit when the shower is in the assembled configuration for pumping the hot water from the container, wherein hot water is delivered for showering by an individual when in use;

wherein when the shower is in the assembled configuration, the shower may be readily knocked-down

into the disassembled configuration and the components thereof may be carried by the container with at least a portion of the components nested therein; and

the container including a handle for transporting the portable shower when in the disassembled configuration, wherein all of the components of the shower may be transported therewith when not in use,

a lid removably disposed over the container, thereby sealing the container for storing and retaining the water therein when the shower is in the assembled configuration and further for storing and retaining components therein when the shower is in the disassembled configuration,

wherein the pump is carried by the lid in the assembled and disassembled configurations.

19. A knockdown portable hot water shower having a disassembled configuration utilized for storing and transporting the shower when not in use, and an assembled configuration utilized for showering by an individual when in use, the knockdown portable hot water shower is comprised of:

a container for use as a storage container when the shower is in the disassembled configuration, wherein components of the portable shower are received therein for the storage thereof, and further for use as a reservoir when the shower is in the assembled configuration, wherein water is received and heated therein for the use thereof;

a gas burner including a burner head which is positioned above the gas burner and both of which are positioned below the container when the shower is in the assembled configuration, wherein the water in the container is heated for showering by an individual when in use, the gas burner and burner head sized for being received in the container when the shower is in the disassembled configuration, wherein the gas burner is stored when not in use;

means for supporting the container above the gas burner;

a flexible water conduit having a first lower end and a second upper end, the conduit extending upwardly from the container when the shower is in the assembled configuration, wherein hot water is delivered upwardly through the conduit from the first end to the second end for showering by an individual when in use;

a shower head carried by the second end of the flexible water conduit above the container when the shower is in the assembled configuration, wherein hot water delivered from the second end of the conduit passes therethrough and is delivered therefrom as a hot water spray for showering by an individual when in use, the shower head being received in the container when the shower is in the disassembled configuration, wherein the shower head is stored when not in use;

means for supporting the flexible water conduit with the second end carrying the shower head thereon above the first end of the conduit when the shower is in the assembled configuration;

a pump between the water in the container and the first end of the water conduit when the shower is in the assembled configuration for pumping the hot water from the container, wherein hot water is delivered for showering by an individual when in use;

wherein when the shower is in the assembled configuration, the shower may be readily knocked-down into the disassembled configuration and the components thereof may be carried by the container with at least a portion of the components nested therein; and

the container including a handle for transporting the portable shower when in the disassembled configuration, wherein all of the components of the shower may be transported therewith when not in use,

wherein the means for supporting the flexible water conduit in the assembled configuration is comprised of:

a plurality of support portions, each of said support portions axially removably secured to one another when in the assembled configuration forming an integral knockdown upstanding support, at least one of said support portions further being removably carried by the container when in the assembled configuration, wherein the support is maintained upstanding for supporting the water conduit when in use;

means for removably securing the water conduit to the integral upstanding support when in the assembled configuration, whereby the water conduit is supported when in use,

wherein the plurality of support portions includes an uppermost support portion having a bend formed therein forming an outwardly extending portion, the outwardly extending portion further having a slot formed therein at the bend thereof and extending along the outwardly extending portion, whereby the water conduit including the second end thereof may be received and supported in the slot with the shower head being substantially outwardly directed to deliver the hot spray of water to an individual when in use.

20. A lightweight knockdown portable hot water shower for use in remote areas, comprising, in combination:

a container of water;

means to elevate the water from a lower temperature to a higher temperature, said temperature elevation means configured with said container as a free-standing tank; and

a means to atomize said water at a height above a person using said shower, whereby said atomizing means is coupled to said container,

wherein said atomization means includes:

a shower head consisting of an inlet leading to an empty space surrounded by a back wall receiving said inlet, and a shower face opposite said back wall and connected to said back wall by a side wall radially surrounding said empty space;

a set of apertures formed in the shower face, wherein the apertures are substantially cylindrical in shape allowing formation of an appropriate discharge of water, including both an inner five-point star configuration and an outer five-point star configuration, which together approximate a pentagon formation;

a pump between the water in said container and the lower first end of a water conduit, thereby delivering the water from said container through said water conduit to said inlet of said shower head, wherein said pump delivers water such that a fine

spray of water is delivered for showering by an individual when in use,

wherein said temperature elevation means and free-standing configuration include:

a support housing having a bottom wall, upwardly extending side walls, a plurality of stabilizing legs extending radially outward from the lower portion of said side walls, a plurality of support uprights carried by said side walls and extending upwardly therefrom, each of said uprights having a shoulder, such that said container is received on and supported by said shoulders, a plurality of openings in said side walls providing access for air and burner adjustments;

and a gas burner including a burner head, both being positioned within the support housing and below said container, wherein the water in said container is heated to an increased temperature.

21. The shower of claim **20** wherein the components of said shower may be broken down into individual units such that all components will fit within said container forming a single easily transportable unit,

said container having a handle attached to said upwardly extending walls of said container for use in transporting said shower in its disassembled configuration.

22. A lightweight knockdown portable hot water shower for use in remote areas, comprising, in combination:

a container of water;

means to elevate the water from a lower temperature to a higher temperature, said temperature elevation means configured with said container as a free-standing tank; and

a means to atomize said water at a height above a person using said shower, whereby said atomizing means is coupled to said container.

wherein said temperature elevation means and free-standing configuration include:

a support housing having a bottom wall, upwardly extending side walls, a plurality of stabilizing legs extending radially outward from the lower portion of said side walls, a plurality of support uprights carried by said side walls and extending upwardly therefrom, each of said uprights having a shoulder, such that said container is received on and supported by said shoulders, a plurality of openings in said side walls providing access for air and burner adjustments:

and a gas burner including a burner head, both being positioned within the support housing and below said container, wherein the water in said container is heated to an increased temperature.

23. The shower of claim **22** wherein the components of said shower may be broken down into individual units such that all components will fit within said container forming a single easily transportable unit,

said container having a handle attached to said upwardly extending walls of said container for use in transporting said shower in its disassembled configuration.

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